

Parameter	Meaning	Guess
β	infection rate	0.2
α	recovery rate	0.2
$\frac{1}{\alpha}$	infection period	5
$\mathcal{R}_0 = \frac{\beta}{\alpha}$	basic reproduction number	1
$S(0)$	initial susceptible	$n = 5611$
$I(0)$	initial infectious	1
$R(0)$	initial removed	$4n = 22444$
$N = S(0) + I(0) + R(0)$	population size	$5n + 1 = 28056$